Ordering number: EN 3264

Monolithic Linear IC

No.3264

SANYO

LA6530,6531

2-Channel BTL-Use Drivers

The LA6530, 6531 are 2-channel BTL-use drivers designed for compact disc pickup actuation.

Functions and Features

- High output current (I_O max = 0.7A)
- Wide operating voltage range (4 to 15V)
- Low input bias current
- LA6530 .... Output of amps 1 to 4 at muting-ON mode : OFF
- LA6531 .... Output of amps 1 to 4 and buffer amp at muting-ON mode : OFF

Maximum Ratings at Ta = 25°C

				unit
Maximum Supply Voltage	V_{CC} max		16	V
Allowable Power Dissipation	Pd max		1.9	W
Differential Input Voltage	V_{ID}	Amp 2, amp 3	15	V
Common-Mode Input Voltage	V_{ICM}	Amp 2, amp 3	15	V
Maximum Input Voltage	V_{INB} max	Buffer amp	15	V
Maximum Flow-in Current at Muting Pin	I_M max		1.0	mA
Maximum Output Current	I_O max		0.7	A
Operating Temperature	Topr		−20 to +75	°C
Storage Temperature	Tstg		−55 to +150	°C

Operating Conditions at Ta = 25°C

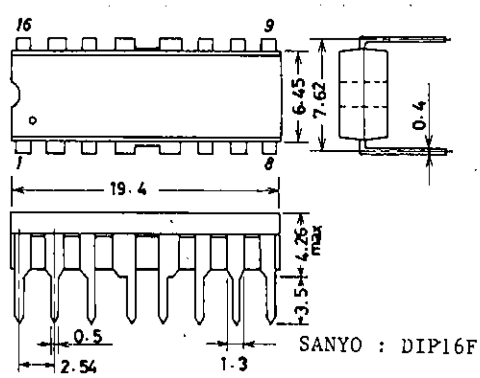
			unit
Maximum Supply Voltage	V_{CC} max	5	V
Load Resistance	R_L	8	Ω

Operating Characteristics at Ta = 25°C, V_{CC} = 5.0V

			min	typ	max	unit
No-Loaded Current Dissipation 1	$I_{CC}1$	Mute OFF, pins 8,9,16 GND	5	10	20	mA
No-Loaded Current Dissipation 2	$I_{CC}2$	Mute OFF, pins 8,9,16 GND	3	7	15	mA
No-Loaded Current Dissipation 3	$I_{CC}3$	Mute OFF, pins 8,9,16 1/2 V_{CC}	10	20	30	mA
No-Loaded Current Dissipation 4	$I_{CC}4$	Mute OFF, pins 8,9,16 1/2 V_{CC}	4	8	16	mA

Continued on next page.

Package Dimensions 3054A-D16FNIC
(unit : mm)



Continued from preceding page.

			min	typ	max	unit
Output Offset Voltage 1	$V_{OF}1$	Out 1 - Out 2	−50		50	mV
Output Offset Voltage 2	$V_{OF}2$	Out 4 - Out 3	−50		50	mV
Buffer Input-Output Voltage Difference	V_{BIO}	Buffer amp	−30		30	mV
Buffer Input Voltage Range	V_{BICM}	Buffer amp	1.5	$V_{CC}-1.5$		V
Common-Mode Input Voltage Range	V_{ICM}	Amp 2, amp 3	1.0	$V_{CC}-1.5$		V
Input Bias Current	I_B			50	300	nA
Output Voltage	V_O	$R_L=8.0\Omega$	2.8	3.3		V
Bridge Output Voltage Difference	V_{OD}	Pins 3-6,11-14 8Ω load	1.8	2.2		V
Closed-Circuit Voltage Gain	V_G		30	38		dB
Muting Pin ON-State Voltage	V_M			0.7		V
Muting Pin Flow-in Current	I_M			3		μA

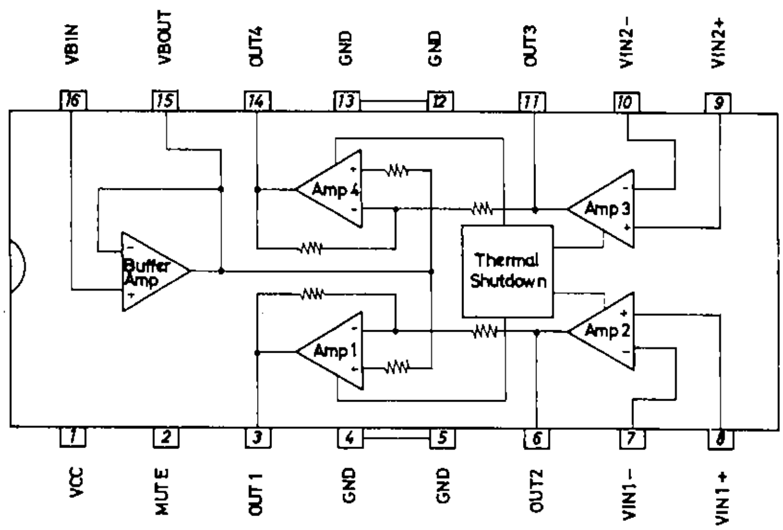
Note) With thermal shutdown function

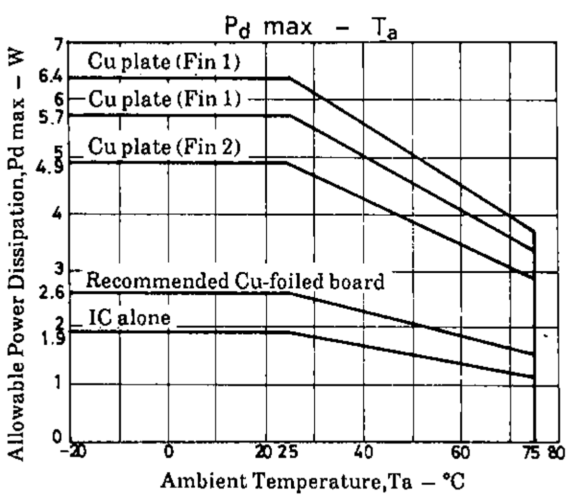
※ : The LA6530 is so designed that the outputs at OUT1 to OUT4 are turned OFF and the output at VBOUT is not turned OFF at the muting-ON mode.

※ : The LA6531 is so designed that the outputs at OUT1 to OUT4 and the output at VBOUT are turned OFF.

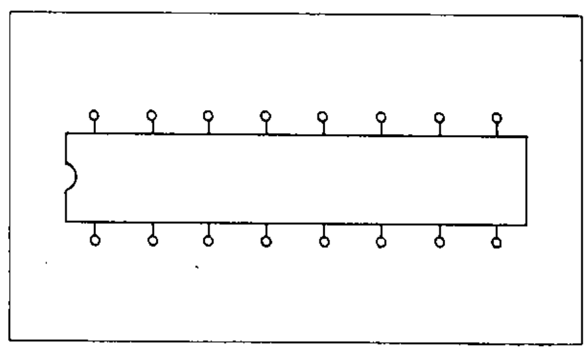
※ : Be carefull in handling the LA6530, 6531, because dielectric breakdown is liable to occur.

Equivalent Circuit Block Diagram

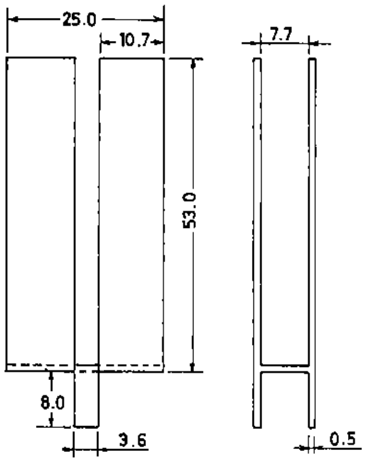




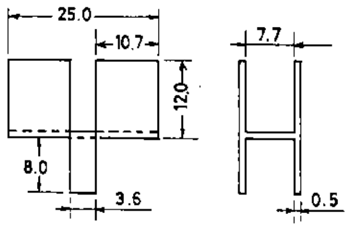
Sample Printed Circuit Pattern



Cu-foiled area 80×60mm[2]



Fin 1



Fin 2